

*E1*

insulating film, said portion to become at least a channel region;  
crystallizing said semiconductor film by laser irradiation through said insulating film;  
removing said insulating film;  
forming a gate insulating film on said semiconductor film;  
forming a gate electrode on said gate insulating film, said gate electrode having tapered side edges; and  
forming source and drain regions in said semiconductor film by ion doping through said gate insulating film.

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*E2*

18. (Amended) A method for fabricating a semiconductor device, comprising the steps of:  
forming a semiconductor film comprising amorphous silicon on an insulating surface;  
forming an insulating film on said semiconductor film;  
introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel region;  
crystallizing said semiconductor film by laser irradiation through said insulating film;  
removing said insulating film;  
forming a gate insulating film on said semiconductor film;  
forming a gate electrode on said gate insulating film, said gate electrode having tapered side edges; and  
forming source and drain regions in said semiconductor film by ion doping.

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*E3*

23. (Amended) A method for fabricating a semiconductor device, comprising the steps of:  
forming a semiconductor film comprising amorphous silicon on an insulating surface;  
forming an insulating film on said semiconductor film;  
introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel region;

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and

crystallizing said semiconductor film by laser irradiation through said insulating film;  
removing said insulating film;  
forming a gate insulating film on said semiconductor film;  
forming a gate electrode on said gate insulating film; and  
forming source and drain regions in said semiconductor film by ion doping which is performed through said gate insulating film.

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F47  
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29. (Amended) A method for fabricating a semiconductor device, comprising the steps of:  
forming a semiconductor film comprising amorphous silicon on an insulating surface;  
forming an insulating film on said semiconductor film;  
introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel region;  
crystallizing said semiconductor film by laser irradiation through said insulating film;  
removing said insulating film;  
forming a gate insulating film on said semiconductor film;  
forming a gate electrode on said gate insulating film; and  
forming source and drain regions in said semiconductor film by ion doping.

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F5  
E8

34. (Amended) A method for fabricating a semiconductor device, comprising the steps of:  
forming a semiconductor film on an insulating surface;  
forming an insulating film on said semiconductor film;  
introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel region;  
crystallizing said semiconductor film by laser irradiation through said insulating film;

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removing said insulating film;  
forming a gate insulating film on said semiconductor film;  
forming a gate electrode on said gate insulating film; and  
forming source and drain regions in said semiconductor film by ion doping.

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*File 7*

37. (Amended) A method for fabricating a semiconductor device, comprising the steps of:

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forming a semiconductor film on an insulating surface;  
forming an insulating film on said semiconductor film;  
introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel region;  
crystallizing said semiconductor film by laser irradiation through said insulating film;  
removing said insulating film;  
forming a gate insulating film on said semiconductor film;  
forming a gate electrode on said gate insulating film, said gate electrode having tapered side edges; and  
forming source and drain regions in said semiconductor film by ion doping.

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*File 7*

41. (Amended) A method for fabricating a semiconductor device, comprising the steps of:

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forming a semiconductor film on an insulating surface;  
forming an insulating film on said semiconductor film;  
introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel region;  
crystallizing said semiconductor film by laser irradiation through said insulating film;  
removing said insulating film;  
forming a gate insulating film on said semiconductor film;  
forming a gate electrode on said gate insulating film;

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forming source and drain regions in said semiconductor film by ion doping through said gate insulating film.

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E8  
E9

53. (Amended) A method for fabricating a semiconductor device, said semiconductor device having at least one thin film transistor comprising a semiconductor film formed adjacent to a gate electrode with a gate insulating film therebetween, said method comprising the steps of:

forming said semiconductor film over a substrate;  
forming an insulating film on said semiconductor film;  
introducing boron into at least a portion of said semiconductor film through said insulating film, said portion becoming at least a channel region of said thin film transistor;  
crystallizing said semiconductor film by laser irradiation through said insulating film;  
and  
removing said insulating film.

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E9  
E10

55. (Amended) A method for fabricating a semiconductor device, said semiconductor device having at least one thin film transistor comprising a semiconductor film formed adjacent to a gate electrode with a gate insulating film therebetween, said method comprising the steps of:

forming said semiconductor film over a substrate;  
forming an insulating film on said semiconductor film;  
introducing boron into at least a portion of said semiconductor film through said insulating film, said portion becoming at least a channel region of said thin film transistor;  
crystallizing said semiconductor film by laser irradiation through said insulating film;  
removing said insulating film; and  
forming source and drain regions in said semiconductor film by ion doping.

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E10  
E11

58. (Amended) A method for fabricating a semiconductor device, said

semiconductor device having at least one thin film transistor comprising a crystalline semiconductor film formed adjacent to a gate electrode with a gate insulating film therebetween, said method comprising the steps of:

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*com*

- forming a semiconductor film comprising amorphous silicon over a substrate;
- forming an insulating film on said semiconductor film;
- introducing boron into at least a portion of said semiconductor film through said insulating film, said portion becoming at least a channel region of said thin film transistor;
- crystallizing said semiconductor film by laser irradiation through said insulating film;
- removing said insulating film; and
- forming source and drain regions in the crystalline semiconductor film by ion doping.

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Please add new claims 65-84 as follows:

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--65. (New) A method according to claim 12 wherein said gate insulating film comprises TEOS.

66. (New) A method according to claim 18 wherein said gate insulating film comprises TEOS.

67. (New) A method according to claim 23 wherein said gate insulating film comprises TEOS.

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68. (New) A method according to claim 29 wherein said gate insulating film comprises TEOS.

69. (New) A method according to claim 34 wherein said gate insulating film comprises TEOS.

70. (New) A method according to claim 37 wherein said gate insulating film comprises TEOS.

71. (New) A method according to claim 41 wherein said gate insulating film comprises TEOS.

72. (New) A method according to claim 53 wherein said gate insulating film comprises TEOS.

73. (New) A method according to claim 55 wherein said gate insulating film comprises TEOS.

74. (New) A method according to claim 58 wherein said gate insulating film comprises TEOS.

75. (New) A method according to claim 12 wherein said semiconductor device is a liquid crystal display.

76. (New) A method according to claim 18 wherein said semiconductor device is a liquid crystal display.

77. (New) A method according to claim 23 wherein said semiconductor device is a liquid crystal display.

78. (New) A method according to claim 29 wherein said semiconductor device is a liquid crystal display.

79. (New) A method according to claim 34 wherein said semiconductor device is a

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